PATENT

REMARKS

Claims 1-29 are pending in the present application. Claims 1-29 have been rejected. Applicant proposes to amend no claims herein, and respectfully requests reconsideration of the application claims as listed herein.

Applicant respectfully responds to this Final Office Action.

35 U.S.C. § 102(b) Anticipation Rejections

From-t 190

Anticipation Rejection Based on U.S. Patent No. 5.577,168 to Haas et al.

The Examiner rejected claims 1 and 2 under 35 U.S.C. § 102(b) based on U.S. Patent No. 5,577,168 to Haas et al. (hereinafter, "Haas").

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. Verdegaal Brothers v. Union Oil Co. of California, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The identical invention must be shown in as complete detail as is contained in the claim. Richardson v. Suzuki Motor Co., 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

Applicant submits that the Haas references does not and cannot anticipate under 35 U.S.C. § 102 the presently claimed invention of independent claim 1, and claim 2 depending therefrom, because the Haas reference does not describe, either expressly or inherently, the identical inventions in as complete detail as are contained in the claims.

Applicant respectfully disagrees that the Haas reference anticipates Applicant's invention as claimed in independent claim I which reads:

1. A method of optimizing radio-access-network-packet-data-service-node interface communications channel resources in a communications network when a mobile station moves from a first infrastructure element to a second infrastructure element associated with a packet data services node of the communications network, the method comprising the step of:

transmitting from the second infrastructure element associated with the packet data services node a message including a number of dormant network connections associated with the mobile station and a reduced list of identifiers associated with the dormant network connections, wherein the dormant network connections are connections that are not being used to transmit traffic channel data. (Emphasis added.)

Attorney Docket No.: 000090CTP

Customer No.: 23696

9

13:56

From-t 190

In contrast, the Haas reference discloses:

A packetized cellular system in which a mobile quasi-periodically transmits a beacon signal containing an ID number to a first base station in the cell in which it is located for storage with the ID's of other active mobiles in the cell. A copy of a list of the active mobiles in that cell is transmitted to all adjacent cells where they are placed on non-active list. Control of a mobile is handed-off to a second base station upon the receipt of a transmitted ID number of the mobile at the second base station. (Haas Abstract.)

The Office Action alleges:

Regarding claim 1, Haas teaches a method for transmitting from a second infrastructure element (e.g., one of cells 6 in FIG. 1) associated with a packet data services node (e.g., base station 10, see col. 2, line 1-col. 4, line 67 regarding data traffic in a packet switched system) a message (e.g., list of active mobiles associated with the cell, or second infrastructure element, see col. 3, lines 50-64) including a number of metwork connections (e.g., connections of the active mobiles in the second infrastructure element) associated with a mobile station (e.g., mobile 14) and a reduced list of identifiers (e.g., ID numbers) and enhanced information (e.g., addresses of destinations and channel number, see col. 3, lines 58-64) associate with the connections, (Office Action, pp. 4-5; emphasis added.)

If the Office Action's citation of the description of the elements from the Haas reference are combined, from the highlighted quotations above, into a single recitation, it becomes immediately apparent that the disclosure of the Haas reference cannot anticipate under 35 U.S.C. § 102 Applicant's invention as claimed in independent claim 1. Specifically, the aggregated Haas citations of the Office Action describing

 $ilde{arphi}_{-}$. . . a method for transmitting from . . . one of cells 6 in FIG. 1[] associated with . . . base station $10 \dots a \dots$ list of active mobiles associated with the cell \dots including \dots connections of the active mobiles in the second infrastructure element[] associated with a mobile station ..."

do not describe and anticipate Applicant's claimed invention of

"[a] method . . . in a communications network when a mobile station moves from a first infrastructure element to a second infrastructure element associated with a packet data services node of the communications network, the method comprising the step of: transmitting from the second infrastructure element . . . a message including a number of dormant network connections associated with the mobile station "

Attorney Docket No.: 000090CIP

From-t 190

PATENT

By way of emphasis, Applicant's claim language specifically recites "a message including a number of dormant network connections associated with the mobile station"

The Haas reference does not describe "a number of . . . connections associated with the mobile station" but contrastingly describes "the address of the destinations of the connections (if such exist) of the active mobiles 14 in the coverage area of the base station" (Haas, col. 3, lines 61-63; emphasis added.)

Therefore, independent claim 1, and claim 2 depending therefrom, cannot be anticipated by the Haas reference under 35 U.S.C. § 102. Accordingly, such claims are allowable over the cited prior art and Applicant respectfully requests that such rejections be withdrawn.

35 U.S.C. § 103(a) Obviousness Rejections

Obviousness Rejection Based on U.S. Patent No. 5,577,168 to Haas et al.

Claims 5, 6, 9, 11-15, 17-21 and 23-26 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Haas et al. (U.S. Patent No. 5,577,168). Applicant respectfully traverses this rejection, as hereinafter set forth.

M.P.E.P. 706.02(j) sets forth the standard for a Section 103(a) rejection:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). (Emphasis added).

The 35 U.S.C. § 103(a) obviousness rejection of claims 5, 6, 9, 11-15, 17-21 and 23-26 are improper because the elements for a prima facie case of obviousness are not met.

Specifically, the rejection fails to meet the criterion that the prior art reference must teach or suggest all the claims limitations.

Attorney Docket No.: 000090CIP

PATENT

Claims 5, 6, 9, 11, 15, 17, 21 and 23

From-t 190

Regarding independent claim 5 (and claim 6 depending therefrom), independent claim 9 (and claim 11 depending therefrom), independent claim 15 (and claim 17 depending therefrom), and independent claim 21 (and claim 23 depending therefrom), Applicant sustains the above-proffered arguments that the Haas reference does not teach, suggest or motivate Applicant's invention as claimed.

Specifically, the aggregated Haas citations of the Office Action describing:

"... a method for transmitting from ... one of cells 6 in FIG. 1[] associated with ... base station 10... a... list of active mobiles associated with the cell ... including ... connections of the active mobiles in the second infrastructure element[] associated with a mobile station ..."

do not teach, suggest or motivate Applicant's invention as claimed in the respective independent claims, namely:

- 5. A method . . ., the method comprising the step of: transmitting from the mobile station a message including a number of dormant network connections associated with the mobile station and
- 9. A mobile station . . ., the mobile station comprising: an antenna; a processor coupled to the antenna; and a processor-readable medium accessible by the processor and containing a set of instructions executable by the processor to modulate and transmit from the mobile station a message including a number of dormant network connections associated with the mobile station and
- 15. A mobile station . . ., the mobile station comprising: a device configured to transmit from the mobile station a message including a number of dormant network connections associated with the mobile station and
- A mobile station . . ., the mobile station comprising. means for transmitting from the mobile station a message including a number of dormant network connections associated with the mobile station and

Accordingly, since the Haas reference does not teach, suggest, or motivate Applicant's invention as claimed in claims 5, 6, 9, 11, 15, 17, 21 and 23, the Haas reference cannot render obvious under 35 U.S.C. § 103 Applicant's invention as claimed. Therefore, Applicant respectfully requests that such rejections be withdrawn.

Attorney Docket No.: 000090CIP

From-t 190

PATENT

The present rejection is improper on an additional ground. Specifically, the Office Action further states:

While Haas disclose the message is maintained within, and transmitted from a base station and not a mobile station, it is generally considered to be within the ordinary skill in the art to shift the location of parts absent a showing of unexpected results. Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to shift the location of database listing from the base station to mobile station since it is generally considered to be within the ordinary skill in the art to shift the location of parts absent a showing of unexpected results. The contention of obvious choice in design can be overcome if Applicant establishes unexpected results. In re Japikse, 86 USPQ 70 (CCPA 1950). (Office Action, pp. 5-6; emphasis added.)

While Applicant submits that the use of the "obvious choice in design" rejection is an improper use of a well established basis for unpatentability, Applicant submits that the mere fact that a communication system that relies upon the efficient location of data for minimizing the unnecessary transmission of data is a basis alone for overcoming the "unexpected results" burden. Therefore, Applicant submits that not only is the "obvious choice" rejection improper and should be withdrawn, but also the burden of "unexpected results" has been met. Applicant also respectfully requests that the rejection be withdrawn based upon meeting the burden of unexpected results.

Claims 6, 12-14, 18-20 and 24-26

The Office Action alleges:

Regarding claims 12, 18 and 24, the message of Haas does not comprise Service Request Identifier (e.g., see col. 3, lines 50-64).

Regarding claims 6, 14, 20 and 26, the message of Haas includes packet zone identification information (e.g., lists are specific to coverage area, see col. 3, lines 50-64).

Regarding claims 13, 19 and 25, Haas teaches the message comprises an origination message including an indicator that the dormant network connections are dormant (e.g., the message includes channel numbers associated with the connection, wherein the assigning of channel number is indicative of the status of the connection as either active or dormant, see col. 3, line 50-col. 4, line 18). (Office Action, pp. 6-7.)

Attorney Docket No.: 000090CIP

P.017/020 F-966

T-188

PATENT

The nonobviousness of the independent claims 5, 9, 15, 21 precludes a rejection of the dependent claims 6, 12-14, 18-20 and 24-26 respectively depending therefrom because a dependent claim is obvious only if the independent claim from which it depends is obvious. See In re Fine, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988), see also MPEP § 2143.03. Therefore, Applicant requests that the rejection of claims 6, 12-14, 18-20 and 24-26 be withdrawn.

Obviousness Rejection Based on U.S. Patent No. 5,577.168 to Haas et al. in View of U.S. Patent No. 6,496,491 to Chuah et al.

Claims 3, 4, 7, 8, 10, 16, 22 and 27-29 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the Haas reference in view of the Chuah reference. Applicant respectfully traverses this rejection, as hereinafter set forth.

M.P.E.P. 706.02(j) sets forth the standard for a Section 103(a) rejection:

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). (Emphasis added).

The 35 U.S.C. **§** 103(a) obviousness rejection of claims 3, 4, 7, 8, 10, 16, 22 and 27-29 are improper because the elements for a prima facie case of obviousness are not met. Specifically, the rejection fails to meet the criterion that the prior art reference must teach or suggest all the claims limitations.

Claims 3, 10, 16, 22, 27 and 29

The Office Action alleges:

... However, Haas may not specifically disclose the connections are PPP connections, wherein the connection table would be reduced entry PPP connection table. Chuah also teaches a method for packet data communications experiencing handoffs, and further, teaches a specific method for allowing the transfer of files and

Attorney Docket No.: 000090CIP

Customer No.: 23696

14

From-t 190

PATENT

database access connections wherein a PPP connection is transferred from one packet server to another packet server (e.g., see abstract) without having to terminate a current PPP connection and then re-establish a new PPP connection (e.g., see col. 2, lines 1-9). Chuah also teaches a connection table is provided for the PPP connections (e.g., see col. 14, lines 35-41). The teachings of Chuah provide a mobile communications user with the ability to change connections from one network access server to another without having to terminate and then re-establish connections (e.g., see col. 1, lines 55-col. 2, line 37). As discussed, Haas also discloses mobile communications may include file transfer and database access (e.g., see col. 1, lines 15-23), however, Haas may not specifically disclose an embodiment for achieving the transferring of a PPP connection from one packet server to another packet server without having to terminate a current PPP connection and then re-establish a new PPP connection. (Office Action, pp. 7-8).

Applicant herein sustains the above proffered arguments relating to the lack of teaching and suggestion in the Haas reference regarding Applicant's invention as presently claimed, namely:

3. A method of simplifying Packet Control Function network element functionality when a mobile station moves from a first infrastructure element of a packet data services network to a second infrastructure element of the packet data services network, the method comprising the step of:

maintaining a reduced entry PPP connection table that includes radio access network (RAN) PDSN interface (RPI) communication pipe identifiers. (Emphasis added).

The Haas reference does not teach or suggest "maintaining a reduced entry PPP connection table that includes radio access network (RAN) PDSN interface (RPI) communication pipe identifiers." As shown above, while the Haas reference may teach or suggest a base station maintaining a list of active mobiles, the address of the destinations of the connection of the active mobiles, and the transmission channel numbers associated with the active mobile, the Haas reference does not teach or suggest the elements of Applicant's invention as claimed. (Haas, col. 3, lines 50-64).

Additionally, the Chuah reference does not teach or suggest "maintaining a reduced entry PPP connection table that includes radio access network (RAN) PDSN interface (RPI) communication pipe identifier." Column 14, lines 35-41 of Chuah are cited in the last Office Action as teaching a PPP connection table. The cited portion of the Chuah reference refers to a "connection table similar to that shown in Table Four." (Chuah, col. 14, lines 37-38). The

Attorney Docket No.: 000090CTP

connection table of Table 4 in the Chuah reference is "for each direction of communication for each established VPN session with a remote user." (Chuah, col. 6, lines 8-10). The Chuah reference teaches a VPN connection table, however, the VPN connection table of the Chuah reference is <u>not</u> a "reduced entry PPP connection table that includes radio access network (RAN) PDSN interface (RPI) communication pipe identifiers."

Therefore, neither the Haas reference nor the Chuah reference, either individually or in any proper combination, teaches, suggest or motivates Applicant's invention as claimed. Therefore, Applicant respectfully requests that such a rejection be withdrawn.

Regarding independent claim 27, Applicant's invention as claimed recites:

27. A packet data services node configured to maintain Point to Point Protocol connection tables of dormant network connections associated with a mobile station when the mobile station moves from a first infrastructure element of a packet data services network to a second infrastructure element of the packet data services network, the packet data services node comprising:

a radio-access-network-PDSN channel interface;

a processor coupled to the radio-access-network-PDSN channel interface; and a processor-readable medium accessible by the processor and containing a set of instructions executable by the processor to update the dormant network connection information associated with the mobile station, wherein the dormant network connection information is information relating to a connection that is not being used to transmit traffic channel data. (Emphasis added).

Applicant sustains the above-proffered arguments that neither the Haas reference nor the Chuah reference, either individually or in any proper combination, teach, suggest or motivate Applicant's invention as presently claimed. Accordingly, the rejection of claim 27 should be withdrawn.

Regarding dependent claims 4, 7, 8, 10, 16, 22, 28 and 29, the nonobviousness of the respective independent claims of claims 4, 7, 8, 10, 16, 22, 28 and 29, precludes a rejection of the dependent claims therefrom because a dependent claim is obvious only if the independent claim from which it depends is obvious. See In re Fine, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988), see also MPEP § 2143.03. Therefore, Applicant requests that the rejection of claims 4, 7, 8, 10, 16, 22, 28 and 29 be withdrawn.

Attorney Docket No.: 000090CIP

PATENT

ENTRY OF REMARKS/AMENDMENT

Applicant proposes to amend no claims herein. The proposed arguments and previous amendments are supported by the as-filed specification and drawings and do not add any new matter to the application. Further, Applicant's remarks do not raise new issues or require a further search. Finally, if the Examiner determines that the remarks do not place the application in condition for allowance, entry is respectfully requested upon filing of a Notice of Appeal herein.

REQUEST FOR ALLOWANCE

In view of the foregoing, Applicant submits that all pending claims in the application are Accordingly, reconsideration and allowance of this application are earnestly solicited. Should any issues remain unresolved, the Examiner is encouraged to telephone the undersigned at the number provided below.

Respectfully submitted,

Dated: September 30, 2005

Roberta Young, Reg. No. 53,818

(858) 658-5803

QUALCOMM Incorporated 5775 Morehouse Drive San Diego, California 92121 Telephone: (858) 658-5787

Facsimile:

(858) 658-2502

Attorney Docket No.: 000090CIP

Customer No.: 23696

17